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### **DECLARATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Materials and Products Using Nanostructured Non-Stoichiometric Substances

the specification of which (I authorize Choate, Hall & Stewart to check one of the following, three choices, and fill in the blanks, if applicable):

<u>X</u> is a	ttached hereto	•
onwas	s filed on(if	as Application Serial No and amended applicable).
on	vas filed as PCT inte	ernational application No, and was amended under PCT Article 19 (if applicable).
I hereby identified specifiabove.	state that I have revi- ication, including the	ewed and understood the contents of the above- e claims, as amended by any amendment referred to
I acknow examination of t §1.56.	ledged the duty to d his application in ac	isclose information which is material to the cordance with Title 37, Code of Federal Regulations
of any foreign apidentified below	oplication(s) for pate any foreign applicat	ly benefits under Title 35, United States Code, §119 ent or inventor's certificate listed below and have also tion for patent or inventor's certificate having a filing which priority is claimed:
Prior Foreign Ap	pplication(s):	Priority Claimed
(Number)	(Country)	(Day/Month/Year/Filed) Yes No
(Number)	(Country)	(Day/Month/Year/Filed) Yes No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT, international filing date of this application:

(Application Serial No.)	(filing date)	(status-patented, pending, abandoned)
(Application Serial No.)	(filing date)	(status-patented, pending, abandoned)
PCT Applications designa	ating the United St	ates
(PCT Appl. No.)	(U.S.S.N.)	(status-patented, pending, abandoned)
each of the claims of this application in the manner §112, I acknowledge the defined in Title 37. Code	application is not on provided by the fill the fill the fill to disclose into of Federal Regular	ed below and, insofar as the subject matter of disclosed in the prior United States rst paragraph of Title 35, United States Code, formation which is material to patentability as tions, §1.56 which became available between ne national filing date of this application.
Provisional Application(s	):	
"Materials and Products I	Jsing Nanostructu	red Non-Stoichiometric Substances"
60/111,442 Application Number	12/1/98 Filing Date	pending_ Status
Application Number	Filing Date	Status

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 20f the United State Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of first inventor: Tables Yaday  Date: 8 23 99
inventor's signature.
Residence: 8724 Skyland, Longmont, CO Citizenship: USA
Post Office Address: 2620 Trade Center Ave, Longmont, CO 80503
Full name of first inventor: Ming Au
Inventor's signature:  Residence: 1402 Shalf & S. Chemotte Citizenship: CHINA  Citizenship: CO 80503
Residence: 1402 Straft St 5. CARCHETTE Citizenship: CHINA
Post Office Address: 2620 Trade Center Ave, Longmont, CO 80503
Full name of first inventor: Bijan Miremadi
Date: March 23,99
Inventor's signature: Biffan Mires and Date: March 23,99  Residence: #15-207, 2727 Welson Rel. Citizenship: CANADA
Residence: 3412-407, 4747 Message Control Ave. Longmont CO 80503
Post Office Address: 2620 Trade Center Ave, Longmont, CO 80503
A.C. A. L. L. English
Full name of first inventor: John Freim  Inventor's signature: Date: March 17, 1997
Residence: 3577 (ARKIAR (IR LUMBUR CO Citizenship: USA
Residence: 35 1 + CARRIAR LIK CO 80503
Post Office Address: 2620 Trade Center Ave, Longmont, CO 80503
· ·
Full name of first inventor: Vnval Avniel
Inventor's signature:  Residence: 204 State, Longmont, CO 80503  Post Office Address: 2620 Trade Center Ave, Longmont, CO 80503
Residence: 204 B Ack, Loughout Citizenship: USA
Post Office Address: 2620 Trade Center Ave, Longmont, CO 80503
·
Full name of first inventor: Roger Directine
Inventor's signature: Date: 3/22/95
Residence: 2857 /K/e Gil. Citizenship: USA
Post Office Address: 2620 Trade Center Ave, Longmont, CO 80503
1 OSI OTHOG ALLIGOSA SOFT
Full name of first inventor: John Alexander
Inventor's signature: Date: 3/22/99
Residence: 1406 PONEWOOD COURT, INCHES Citizenship: LIST UK J.A.
Post Office Address: 2620 Trade Center Ave. Longmont, CO 80503

Full name of first inventor: Evan Franke	, ,
Inventor's signature: Transferde	Date: 3/22/99
inventor's signature.	
Residence: 453 Verdant Cr Longmont Co 80501	_Citizenship: <u>USA</u>
Post Office Address: 2620 Trade Center Ave, Longmont,	

### ATTORNEY'S DOCKET NO.: 2000928-0028

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Yadav et al.

Serial Number:

Filed:

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

### APPOINTMENT OF ATTORNEY

The undersigned hereby appoints Brenda Herschbach Jarrell, Registration No. 39,223; Sam Pasternack, Registration No. 29,576; David J. Powsner, Registration No. 31,868; Paul A. Pysher, Registration No. 40,780; Kevin M. Tormey, Registration No. 41,351; Andrea M. Cezeaux, Registration No. 41,662; Elizabeth E. Nugent, Registration No. 43,839; and Karoline K.M. Shair, Registration No. 44,332, as its attorneys and agents for prosecution of matters relating to the above-identified patent application and to conduct all business in the United States Patent and Trademark Office.

All correspondence should be sent to Elizabeth Nugent, Choate, Hall & Stewart,

Exchange Place, 53 State Street, Boston, Massachusetts 02109.

Name: Tapesh Yadav

Title: President & CEO

On behalf of: Nanomaterials Research Corp.

Dated: <u>May 23</u>, 1999

DS1.471432.1

## **ATTORNEY'S DOCKET NO.: 2000928-0028**

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

. 111 1	HE UNITED STATES		
Applicant: Serial Number: Filed: For:	Yadav, et al.  March 22, 1999  Materials and Products Using Nanostructured Non-Stoichiometric Substances		
Assistant Comm Washington, DC	issioner for Patents 20231		
Sir:	<b>)</b>		
ESTABLISHING RIGHT OF ASSIGNEE TO TAKE ACTION (37 CFR 3.73(b))			
The assignment that the third that t	gnee of the entire right, title and interest, Nanomaterials Research Corporation, take action in the Patent and Trademark Office in the above matter.		
Ownersh	nip by the assignee is established as follows:		
c	documents already recorded in the PTO on		
I	Reel ; and		
	documents separately submitted for recordal to the PTO (a copy of these documents is attached).		

### **STATEMENT**

I, a person authorized to sign on behalf of the assignee, have reviewed the evidentiary documents referred to above and certify that, to the best of my knowledge and belief, title is mine/ours as assignees who seek to take further action.

Signature of Authorized Person

Tapesh Yadav

Name of Authorized Person

President/CEO

Title of Authorized Person

Respectfully submitted,

Karoline Shair

Reg. No. 44,332

Choate, Hall & Stewart Exchange Place 53 State Street Boston, MA 02109 (617) 248-5000

Date: March 22, 1999

### ATTORNEY DOCKET NO.: 2000928-0028

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Yadav, et al.

Serial No.:

Filed:

Herewith

For:

Materials and Products Using Nanostructured Non-Stoichiometric Substances

Assistant Commissioner of Patents Washington, DC 20231

# <u>VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS</u> 37 CFR 1.9(f) and 1.27(c)

### SMALL BUSINESS CONCERN

I hereby declare that I am

( ) the owner of the small business concern identified below:

(X) an official empowered to act on behalf of the small business concern identified

below:

NAME OF CONCERN:

Nanomaterials Research Corporation

ADDRESS OF CONCERN:

2620 Trade Center Ave., Longmont, CO 80503

I hereby declare that the above-identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For the purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full time, part time, or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when, either directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract of law have been conveyed to and remain with the small business concern identified above with regard to the invention titled:

TITLE:

Materials and Products Using Nanostructured Non-Stoichiometric Substances

by:

INVENTOR(S):

Tapesh Yadav, Bijan Miremadi, Ming Au, John Freim, Yuval Avniel, Roger

Dirstine, John Alexander, Evan Franke

### **DECLARATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

#### Nanostructured Fillers and Carriers

the specification of which (I authorize Choate, Hall & Stewart to check one of the following, three choices, and fill in the blanks, if applicable):

_X_ is a	attached hereto	,	
	s filed on	_ as Application	(10 11 11)
S	Serial No	and amended on	(if applicable).
	was filed as PCT in	ternational application No.	<b>.</b>
on	· ·	and was amended under PCT A	rticle 19
on		(if applicable).	
1			,
I acknow his application I hereby oreign applicat below any forei	cluding the claims, vledged the duty to in accordance with claim foreign prior ion(s) for patent or	viewed and understood the conter as amended by any amendment of disclose information which is ma Title 37, Code of Federal Regular ity benefits under Title 35, Unite inventor's certificate listed below atent or inventor's certificate hav claimed:	aterial to the examination of ations, §1.56.  d States Code, §119 of any and have also identified
Prior Foreign A	pplication(s):	Priority Claime	d
Number)	(Country)	(Day/Month/Year/Filed)	Yes No
Number)	(Country)	(Day/Month/Year/Filed)	Yes No
T homobre	alaim the benefit 11	nder Title 35 United States Code	e 8120 of any United States

application(s) or PCT international application(s) designating the United States of America listed

Express Mail No. EI985601759US

below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(filing date)	(status-patented, pending, abandoned)	
(filing date)	(status-patented, pending, abandoned)	
ting the United State	s:	
(U.S.S.N.)	(status-patented, pending, abandoned)	
listed below and, ins d in the prior United ted States Code, §112 as defined in Title 3	ofar as the subject matter of each of the clair States application in the manner provided by 2, I acknowledge the duty to disclose inform 7, Code of Federal Regulations, §1.56 which	ns of this the first ation which became
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r Novel Composites	and Devices."	•
12/17/97 Filing Date	<b>pending</b> Status	. *
for Battery Electrod	les."	÷.
03/24/98 Filing Date	pending Status	
nation and belief are that willful false stat der Section 1001 of T	believed to be true; and further that these sta ements and the like so made are punishable the Fitle 18 of the United State Code and that such	tements were by fine or ch willful 
	(filing date)  ting the United State  (U.S.S.N.)  benefit under Title 3 listed below and, ins d in the prior United ted States Code, §11: as defined in Title 3 g date of the prior ap  : r Novel Composites  12/17/97 Filing Date  for Battery Electrod  03/24/98 Filing Date  at all statements mad nation and belief are that willful false state der Section 1001 of Tourdize the validity of	(filing date) (status-patented, pending, abandoned)  ting the United States:  (U.S.S.N.) (status-patented, pending, abandoned)  benefit under Title 35, United States Code, §119(e) of any United listed below and, insofar as the subject matter of each of the clair of in the prior United States application in the manner provided by ted States Code, §112, I acknowledge the duty to disclose inform as defined in Title 37, Code of Federal Regulations, §1.56 which g date of the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of this in the prior application and the national filing date of the date of the prior application and the national filing date of the date of the prior application and the national filing date of the date of the prior application and the national filing date of the date of the prior application and the national filing date of the prior application and the national filing date of the date of the prior application and the national filing date of the prior application and the national filing date of the prior application and the

Express Mail No. EI985601759US

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*			
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Post Office Address:	2849 East Elvira Rd, Tucson, AZ 85706	<del></del>	• •
Full name of first invent	or: Evan Franke		-
Inventor's signature:	tranfanke	Date:	5/21/98
Residence: 2424 9 <sup>-1</sup> / <sub>2</sub>	Ave #3101 Longmont CO 80503	<u> </u>	
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Full name of first invent			_
Inventor's signature:	Bijan Moeinedi Kimbark St. Apt #8 Longman	Date:	5/21/98
Residence:	Kimbark St. Apt # 8 Longman	#CO	80501
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		• .	iji •
Full name of first invente	//	4	-
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Residence: 250 N. A	rcadia Ave. #616 . Tucson, AZ 85;	<u> </u>	
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